

---

## WHAT IS METADATA?

By Roger Chappell Technology Integration Engineer

In it's simplest terms Metadata is data about data.

The USGS defines metadata as: the content, quality, condition, and other characteristics of data.

In this era of rapid data exchange, and heavy organizational investment in data infrastructure, metadata is quickly becoming a key to protecting your data from misuse and safe guarding it's longevity through time and personnel changes.

Metadata is the what, who, how, why and where of your data.

What is the data you have collected? A brief summery of data elements.

Who is the contact person, and the responsible party for maintenance? This is both general and data element specific.

How was it collected, what procedures or equipment were used? How accurate is it and to what resolution. This will be very important to the end user to evaluate whether your data will be useful to their application. Specify equipment makes, models, and modes of operation for the equipment. If your data is derived from other data sources, how was the source data created, and how did you use it. The more information you have available better. This will help the end user to make intelligent decisions about the use of your data, and will help to safe guard it from misinterpretation.

Why, what is the purpose of this data, why was it collected?

Where, is it located physically, digitally, and geospatially?

These are the general type of questions you will need to answer about your data.

Eventually your data will be incorporated, with other data, and displayed graphically in a GIS system. As GIS systems continue to grow, the demand for data will increase, and more management decisions will be made, based on this new hybrid data. Your answers to these questions will help assure that your data is used being appropriately, in the decision making process.

Have you ever been faced with personnel changes, and the person who left was the only one who knew the real inter working of the job, or in this case a database? Having good metadata will ease that transition, and assure continuity in the program.

So far I have talked mostly about very generic metadata concepts. These concepts can be applied to a verity of functions from taking pictures, writing programs, creating maps to display data, and to the creation of databases. You know why you did, what you did, and metadata is the vehicle to convey that knowledge to others. Any metadata is better then none, and the more well defined and documented the better.

There are some standards for the exchange of geospatial metadata for GIS purposes. If you are using GIS, or GPS to gather data, you will want to use the following URLs to visit their sites. There you will find many resources available to help guild you through the creation of your own metadata.

Just remember that metadata is simply "data about your data," and in this case "more is better".

FGDCs (Federal Geographic Data Committee), website at: <http://www.fgdc.gov>

The FGDC coordinates the development of the National Spatial Data Infrastructure (NSDI). The NSDI encompasses policies, standards, and procedures for organizations to cooperatively produce and share geographic data. There are 16 federal agencies that make up the FGDC in cooperation with organizations from state, local and tribal governments, the academic community, and the private sector.

Geospatial Data Clearinghouse Entry Point, website at: <http://130.11.52.178>

The Geospatial Data Clearinghouse is a collection of over 50 spatial data servers, primarily in North America, that have digital geographic data primarily for use in Geographic Information Systems (GIS). This data collections can be searched through a single interface based on their descriptions or "metadata."

Through this entry point you can discover and access geospatial data resources at the many Clearinghouse sites.

The Washington State Geospatial Clearinghouse, website at: <http://metadata.gis.washington.edu/>. Through this resource you will be able to discover what spatial information is available for Washington State or for other geographic entities.

MetaData and WWW Mapping Home Page, website at: <http://www.blm.gov/gis/nsdi.html>. This award winning site is a gold mine of resources. It features metadata, and covers GIS, and GPS and many other data related issues.

*This page was revised on: 8/6/01*